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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,943	08/20/2001	Ehud Shchori	00/21107	4670

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EXAMINER

KALAFUT, STEPHEN J

ART UNIT	PAPER NUMBER
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1745

DATE MAILED: 07/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/931,943

Applicant(s)

SHCHORI ET AL.

Examiner

Stephen J. Kalafut

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2005 and 2 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-93 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-38, 77-81 and 87-93 is/are allowed.
- 6) ☒ Claim(s) 39-64, 66, 70-76, 82 and 84-86 is/are rejected.
- 7) ☒ Claim(s) 65, 67-69 and 83 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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Claims 39-57, 59-64, 66, 70-76, 82 and 84-86 are rejected under 35 U.S.C. 102(b) as being anticipated by Nitzan (US 5,652,043), for reasons of record as applied to original claims 39-57, 59-64, 66 and 70-76.

Regarding claim 82, the two poles include aqueous electrolytes (column 5, lines 54-59). Regarding claim 84, the solutions in the poles and the layer between them may differ (column 5, lines 60-67). Claim 85 recites a change of state, but this is a process limitation not given weight in a product claim. Claim 86, other than the process limitation "formed in-situ", recites the same characteristics as claim 42.

Claim 58 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nitzan, for reasons of record.

Claims 1-38, 77-81 and 87-93 are allowed. Method claims 1-38, 77-81, 87, 88 and 91-93 all recite the limitations which applicants argue to be distinguishing, which is the self-formation of an interfacial layer by the interaction of components in electrolyte solutions in the two poles. Claims 89 and 90 recite a cell with two such layers, each of the opposite sides of a layer placed between the two poles, which arrangement is not disclosed by the prior art of record.

Claims 65, 67-69 and 83 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The specific polysaccharides of claims 65 and 67-69 are not contemplated for use by, nor seen as obvious additions to, the cell of Nitzan, who also

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requires an additional separator, and does not teach the use of different electrolyte solutions in each of the two poles.

Applicant's arguments filed 21 March 2005 have been fully considered but they are not persuasive.

Applicants argue that the structure disclosed by Nitzan "lacks the distinctive structural characteristics implied by the pending claims", because the present separator self-forms, thus ensuring optimal contact between the separator and the pole layers, and comprises interaction and/or reaction products of components of the electrolyte solutions in the two poles. This is not persuasive because the poles of Nitzan and the electrolyte layer between them all include a polymer, deliquescent material and electroactive solute (column 5, lines 54-59). Thus, the layer between the poles includes materials also present in the electrolyte solutions within the poles themselves. The open language of the present claims, "is comprised", does not preclude the porous insoluble substance disclosed Nitzan, who also teaches that the polymer provides sufficient viscosity to adhere the two poles to the electrolyte layer (column 5, lines 21-25).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Kalafut whose telephone number is 571-272-1286. The examiner can normally be reached on Mon-Fri 8:00 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sjk


STEPHEN KALAFUT
PRIMARY EXAMINER
GROUP 1700